portions having a tapped hole for tightening a copper plate, where a shortage of cooling is caused to be present, the widths of the slit grooves are widened at portions where the cooling should be strengthened, the water flowing resistances of the cooling water at the portions are reduced, and the velocity of the cooling water is prevented from being slowed down.

(2) Cumbersome positioning operations can be simplified when cutting or machining the slit grooves in a copper plate that becomes a cooling plate, wherein it is possible to reduce the production costs.

(3) By making uniform the cooling efficiency over the entirety of the cooling plate by adjusting the pressure loss and flow quantity of cooling water streaming in respective slit grooves, the thermal expansion can be made uniform to prevent strains of the cooling plate from occurring. And, break-out and defects of molded pieces in the continuous casting of molten metal can be prevented from occurring, wherein the yield of the molded pieces can be improved.

What is claimed is:

1. A build-up mold for continuous casting having a cooling plate supporting panel mounted, via tightening members, at the open side of the slit grooves, which become flow passes of cooling water, of the cooling plate in which a number of slit grooves

are formed in the casting direction; wherein the widths of said slit grooves disposed so as to bypass in the vicinity of said tightening members is formed to be larger than the widths of the slit grooves disposed in a zone having high cooling efficiency between said tightening members, and the depths of said slit grooves are formed to be roughly equivalent to each other.

2. The build-up mold for continuous casting as set forth in Claim 1, wherein the ratio (a/b) of the maximum value (a) of said widths of said respective slit grooves in said cooling plate to the minimum value (b) thereof is between 1.1 and 4.

3. The build-up mold for continuous casting as set forth in Claim 1 or 2, wherein a pattern of said slit grooves disposed on said cooling plate is formed to be roughly symmetrical at the left and right sides with respect to the centerline in the casting direction.

4. The build-up mold for continuous casting as set forth in any one of Claims 1 through 3, wherein said slit grooves disposed on said cooling plate are of a slalom type that is formed so as to have a plurality of portions having an appointed curvature, and the widths of slit grooves having a large curvature is formed to be larger than the widths of slit grooves having a small curvature.

5. The build-up mold for continuous casting as set forth in any one of Claims 1 through 4, wherein respective slit grooves of said cooling plate are formed so as to have an appointed width, and velocity and/or pressure loss of cooling water that is provided into said slit grooves at an appointed pressure level are made roughly equivalent to each other.